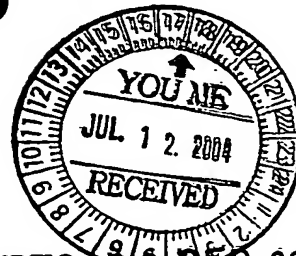


PATENT COOPERATION TREATY  
**PCT**

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)



Rec'd PCT/PTO 29 SEP 2004

Applicant's or agent's file reference OPP040318KR	<b>FOR FURTHER ACTION</b> see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. <b>PCT/KR2004/000600</b>	International filing date (day/month/year) <b>19 MARCH 2004 (19.03.2004)</b>	(Earliest) Priority Date (day/month/year) <b>26 MARCH 2003 (26.03.2003)</b>
Applicant  <b>LG CHEM, LTD. et al</b>		

This International search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. ☐ Certain claims were found unsearchable (See Box No. II)

3. ☐ Unity of invention is lacking (See Box No. III)

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

a. the figure of the drawings to be published with the abstract is Figure No. \_\_\_\_\_

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

b. ☐ none of the figure is to be published with the abstract.

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR2004/000600

**A. CLASSIFICATION OF SUBJECT MATTER****IPC7 B01J 37/00**

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

B01J, C07C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Patents and applications for inventions since 1975

Korean Utility models and applications for Utility models since 1975

Japanese Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKIPASS

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2002-316047 A (Toagosei Co., Ltd.) 29 October 2002 see the whole document	1 - 5
A	US 5,144,090 A (Mitsui Toatsu Chemicals, Inc.) 01 September 1992 see the whole document	1 - 5
A	JP 1999-057476 A (Mitsubishi Rayon Co., Ltd.) 02 March 1999 see the whole document	1 - 5
A	US 5,602,280 A (Sumitomo Chemical Co., Ltd.) 11 February 1997 see the whole document	1 - 5



Further documents are listed in the continuation of Box C.



See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search

06 JULY 2004 (06.07.2004)

Date of mailing of the international search report

06 JULY 2004 (06.07.2004)

Name and mailing address of the ISA/KR

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/KR2004/000600

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 2002-316047 A	29.10.2002	none	
US 5,144,090 A	01.09.1992	EP 460932 A2 JP 4041453 A2 KR 9402982 B1 EP 460932 B1 DE 69109746 C0 DE 69109746T2 JP 2841323 B2	11.12.1991 12.02.1992 09.04.1994 17.05.1995 22.06.1995 26.10.1995 24.12.1998
JP 1999-057476 A	02.03.1999	none	
US 5,602,280 A	11.02.1997	EP 630879 A1 JP 7010799 A2 CN 1099024 A EP 630879 B1 DE 69407669 C0 DE 69407669 T2 EP 630879 B2 CN 1062550 B DE 69407669 T3 JP 3314457 B2	28.12.1994 13.01.1995 22.02.1995 07.01.1998 12.02.1998 10.09.1998 11.04.2001 28.02.2001 25.04.2002 12.08.2002